

Genomic DNA from *Escherichia coli*, Strain CFT073

Catalog No. NR-2656

For research use only. Not for human use.

Contributor:

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Product Description:

Genomic DNA was isolated from a preparation of *Escherichia coli* (*E. coli*), strain CFT073, serotype O6:H1.

The uropathogenic *E. coli* (UPEC) strain CFT073 is a highly virulent, extraintestinal *E. coli* strain that was isolated from a woman with acute pyelonephritis.¹ *E. coli* CTF073 virulence factors include toxins (cytotoxic necrotizing factor 1, hemolysin), adhesins, protease autotransporters, and iron sequestration systems.² *E. coli* CTF073 carries no plasmids.² The complete genomic sequence of *E. coli* strain CFT073 has been determined (5,231,428 bp; GenBank: AE014075).²

NR-2656 has been qualified for PCR applications by amplification of ~ 1500 bp of the 16S ribosomal RNA gene.

Material Provided:

Each vial contains 4 to 6 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH ~7.4). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-2656 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Genomic DNA from *Escherichia coli*, Strain CFT073, NR-2656."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed.

Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm.

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References:

1. Mobley, H. L., et al. "Pyelonephritogenic *Escherichia coli* and Killing of Cultured Human Renal Proximal Tubular Epithelial Cells: Role of Hemolysin in Some Strains." Infect. Immun. 58 (1990): 1281-1289. PubMed: 2182540.
2. Welch, R. A., et al. "Extensive Mosaic Structure Revealed by the Complete Genome Sequence of Uropathogenic *Escherichia coli*." Proc. Natl. Acad. Sci. U.S.A. 99 (2002): 17020-17024. PubMed: 12471157. GenBank: AE014075.

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